IN THE SPECIFICATION

Please replace paragraph **[0029]**, found on page 7 of the specification, as follows:

-- Post processor 108 performs filtering on linearized image 112 to form final image 114, by taking into account the spatial blur applied by optics 102 while preserving the increase in depth of field and/or the reduction of focus-related aberrations. In one exemplary arrangement of post processor 108 as a filter, a Fourier-domain equation is used to calculate the filter:

$$F(\nu, \xi) = \frac{W(\nu, \xi)H^*(\nu, \xi)}{H(\nu, \xi)H^*(\nu, \xi) + \sigma},$$

where ~~F(?, ?)~~$F(\nu, \xi)$ is the filter, W is the ideal diffraction-limited OTF, and H is the input data (H^* is the complex conjugate of H). H is an OTF given by an experimentally determined PSF. The above equation is computed separately at each frequency pair ~~(?, ?)~~(ν, ξ) to build the filter. The bandwidth of the filter is determined by the bandwidth of the ideal OTF, W. The ideal OTF represents on-axis linear imaging at a best focus position. [[s]]σ is the Weiner parameter. --

Please replace paragraph **[0030]**, found on page 7 of the specification, as follows:

-- The difference in PSFs among different exposure levels on non-linear detector 106 presents a concern, as these levels are considered noise. To estimate the value of the Weiner parameter, the variance of the difference between the PSF used to determine the filter (one of the set of various exposure levels, or an average of several exposure levels) and the PSFs of different exposure levels is calculated. A reliable estimate for [[s]]σ is the largest of the variances divided by four. Another metric to determine [[s]]σ is the noise gain of the filter, given by the square root of the sum of squared filter coefficients, given that the filter coefficients sum to one. The larger the value of [[s]]σ, the smaller the noise gain. Noise gains near two are generally the best results when acting on the set of PSFs of different exposure levels. --